

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of the claims in this application:

1-16. (Canceled)

17. (Currently Amended) A method for measuring current flow through a living body, comprising:

measuring a voltage between a first contact located at a first position on a living body and ~~said~~a second contact located at a second position on the living body;

providing a known impedance, separately from said measuring, between said first position and said second position for the living body; and

calculating the current flow ~~associate~~ associated with said voltage.

18. (Original) A method for measuring current flow through a living body, consisting essentially of:

attaching a first contact to a living body at a first position;

attaching a second contact to the living body at a second position;

measuring a voltage between said first contact and said second contact;

providing a known impedance between said first position and said second position for the living body; and

calculating the current flow associated with said voltage.

19. (Canceled)

20. (New) A method for measuring current flow in a living body, comprising:

measuring a voltage between a first position and a second position on a living body;

providing generic body impedance data; and

calculating a current flow in the living body based upon said voltage and said generic body impedance data.

21. (New) The method of claim 20 further comprising attaching to the living body a first contact at said first position and a second contact at said second position.

22. (New) The method of claim 20, wherein said measuring measures said voltage without separately applying a current to the living body.

23. (New) The method of claim 20, comprising:
storing said measured voltage in a removable memory card; and
calculating said current flow based upon said measured voltage stored in said removable memory card.

24. (New) A method for measuring current flow in a living body, comprising:
measuring a voltage between a first position and a second position on a living body without separately applying a current;
providing body impedance data; and
calculating a current flow in the living body based upon said voltage and said body impedance data.

25. (New) The method of claim 24, wherein said providing comprises providing estimated body impedance data.

26. (New) The method of claim 24, wherein said providing comprises providing previously calculated body impedance measurements between said first position and said second position for the living body.

27. (New) The method of claim 24 further comprising:
storing said measured voltage in a removable memory card; and
calculating said current flow based upon said measured voltage stored in said removable memory card.

28. (New) A method for measuring contact current in a living body, comprising:
measuring a voltage between a first position and a second position on a living
body, wherein said voltage is associated with a contact current flowing in the living body;
providing body impedance data;
calculating a current flow for the contact current flowing in the living body
based upon said voltage and said body impedance data.

29. (New) The method of claim 28, wherein said providing comprises providing
estimated body impedance data.

30. (New) The method of claim 28, wherein said providing comprises providing
previously calculated body impedance measurements between said first position and said
second position for the living body.

31. (New) The method of claim 28 further comprising:
storing said measured voltage in a removable memory card; and
calculating said current flow based upon said measured voltage stored in said
removable memory card.